



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D2996

Job Sheet 182650



Part No: D2996

Job Qty: 4 ea

Part Name: Bearpaw, 600



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 8/29/18

Job Tracking No:

Due Date: 9/7/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG REV A1 IPP A 01.03.07 New Issue EC IPP Rev:B New Manufacturing Process 08-11-15 JLM Verified By:EC

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	4 Ea	9/7/18	9/7/18	0.00	0.00	Start Up Waterjet		2-18/08/30
110	Waterjet	4 pcs	9/7/18	9/7/18	0.00	0.00	Waterjet1		2-18/08/30
120	CNC Vertical Machining	4 pcs	9/7/18	9/7/18	0.00	0.00	HAAS1-2		2-18/10/07
130	QC	4 pcs	9/7/18	9/7/18	0.00	0.00	QC2 Machining-1		2-18/10/07
140	QC	4 pcs	9/7/18	9/7/18	0.00	0.00	QC8 Machining-1		2-18/10/07
150	Packaging	4 pcs	9/7/18	9/7/18	0.00	0.00	Packaging3	57 442	OCT 09 2018
160	QC21-SA	4 Ea	9/7/18	9/7/18	0.00	0.00	QC21		6

Part Op 110 - CUT BLANK AS PER FILE D2996

Descriptions: 120 - Inspect material for defects or damage prior to machining Machine as per folio FA120 Debur

OCT 09 2018

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
MUHMWB10	UHMW 1" Black - 48"x120" Tivar Mfg.#52480104	13.6000 sf (3.4 ea)	90-Start up Operation	50455910

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	MUHMWB10	14	993	0

Part Specifications

Specifications could not be found.

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																											
Date : _____	Stan #: _____	QTY Effective : _____			MRB (QSI042) Approval																																																								
Description Work _____		Part: D2996 Job No: 182650 Serial No/Batch: S107242 Revision: _____ Inspector: _____ Exp Date: _____ Instructions: Various STC's Date: 08/30/18			Completed By																																																								
					Lead hand / Supervisor Approval Verification																																																								
					QC / QA Coordinator Approval																																																								
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="4" style="text-align: left;">Root Cause</th> </tr> <tr> <td style="width:15%;">Environment</td> <td style="width:15%;">☐</td> <td style="width:15%;">☐</td> <td style="width:15%;">No Re-verification</td> </tr> <tr> <td>Design</td> <td>☐</td> <td>☐</td> <td>Operator</td> </tr> <tr> <td>Doc/Data</td> <td>☐</td> <td>☐</td> <td>Offset/Setup</td> </tr> <tr> <td>Equip/Tooling</td> <td>☐</td> <td>☐</td> <td>Supplier</td> </tr> <tr> <td>Handling/Pre</td> <td>☐</td> <td>☐</td> <td>Training</td> </tr> <tr> <td>Material</td> <td>☐</td> <td>☐</td> <td>Use for Testing</td> </tr> <tr> <td>Internal Transport</td> <td>☐</td> <td>☐</td> <td>Poor Information</td> </tr> <tr> <td>Tribal Knowledge</td> <td>☐</td> <td>☐</td> <td>Rushing</td> </tr> <tr> <td>LOA</td> <td>☐</td> <td>☐</td> <td>Product Improvement</td> </tr> <tr> <td>Substation</td> <td>☐</td> <td>☐</td> <td>Process Improvement</td> </tr> <tr> <td>Past Expiry Date</td> <td>☐</td> <td>☐</td> <td>Manufacturing Process</td> </tr> <tr> <td>Misidentified</td> <td>☐</td> <td>☐</td> <td>Past Due</td> </tr> <tr> <td colspan="4" style="text-align: center;">OTHER : _____</td> </tr> </table>						Root Cause				Environment	☐	☐	No Re-verification	Design	☐	☐	Operator	Doc/Data	☐	☐	Offset/Setup	Equip/Tooling	☐	☐	Supplier	Handling/Pre	☐	☐	Training	Material	☐	☐	Use for Testing	Internal Transport	☐	☐	Poor Information	Tribal Knowledge	☐	☐	Rushing	LOA	☐	☐	Product Improvement	Substation	☐	☐	Process Improvement	Past Expiry Date	☐	☐	Manufacturing Process	Misidentified	☐	☐	Past Due	OTHER : _____			
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DART AEROSPACE LTD		Work Order:	182650
Description: Bearpaw		Part Number:	D2996
Inspection Dwg: D2996	Rev: A1	Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Inspection Sheet	Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
A	0.06 x 45°	±.03	0.06 x 45°	✓		Vern	
B	0.625	(±).01	0.627	✓		"	
C	0.250	(±).01	0.260	✓		"	
D	R0.25	(±).03	0.250	✓		R.G.	
E	5.86	(±).03	5.862	✓		Vern	
F	0.25 x 45°	(±).03 x 0.5°	0.250 x 45°	✓		Tape	
G	0.950	(±).01	0.958	✓		Vern	
H	0.433	(±).01	0.440	✓		"	
I	19.00	(±).03	19.000	✓		Tape	
J	3.63	(±).03	3.630	✓		Vern	
K	4.54	(±).03	4.540	✓		"	
L	19.34	(±).03	19.340	✓		Tape	
M	Ø0.260	+0.006 -0.001	Ø.260	✓		G.P.	
N	0.93	±.03	0.931	✓		Vern	
O	0.300 .40	+0 -0.03	0.395	✓		D.G.	
P	0.37	(±).03	0.373	✓		Vern	
Q	2.49	(±).03	2.490	✓		"	
R	0.38	(±).03	0.378	✓		"	
S							
T							
U							
V							
W							
X							
Y							

Measured by: DSP	Audited by: DAS	Prototype Approval:	N/A
Date: 18-10-06	Date: 18-10-09	Date:	N/A

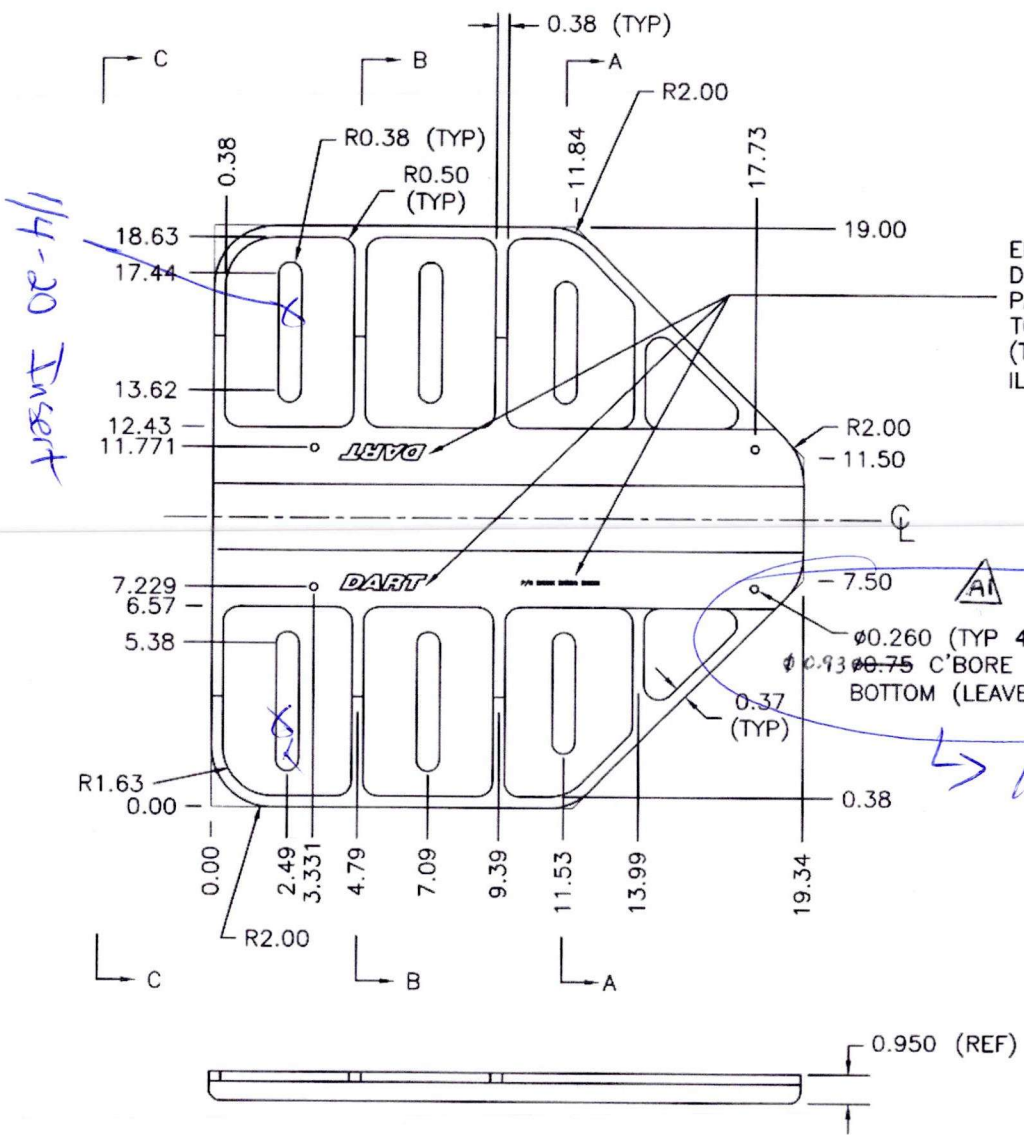
Rev	Date	Change	Revised by	Approved
A	09.05.04	New Issue	KJ/DD	



DESIGN	DRAWN BY	DART AEROSPACE LTD
		HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO.
		D2996
DATE	TITLE	REV. A
01.02.23	BEARPAW	SHEET 1 OF 2
		SCALE
		1:6
A	01.02.23	NEW ISSUE
A1	03.01.13	$\phi 0.93$ was $\phi 0.75$

RELEASED
01.03.14

ENGRAVE LOGO TO MAX DEPTH OF 0.012. ENGRAVE PART AND BATCH NUMBERS TO MAX DEPTH OF 0.010. (TYPICAL LOCATION AS ILLUSTRATED)

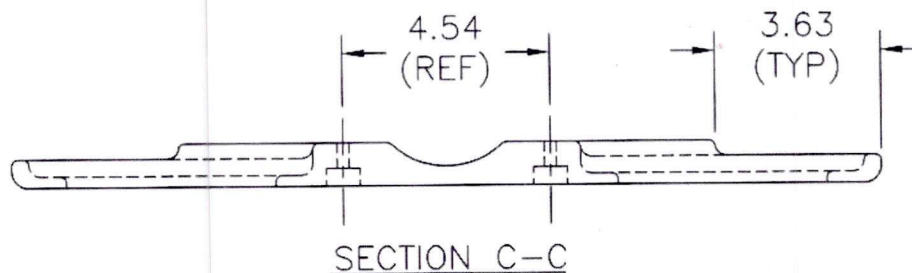
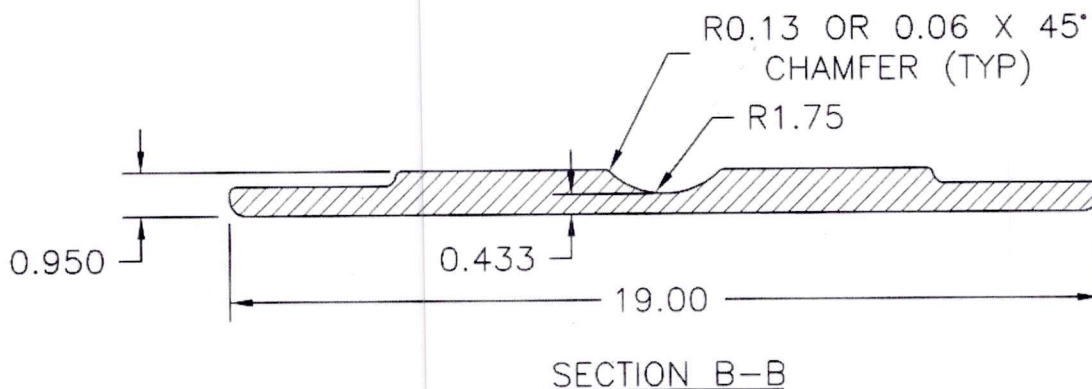
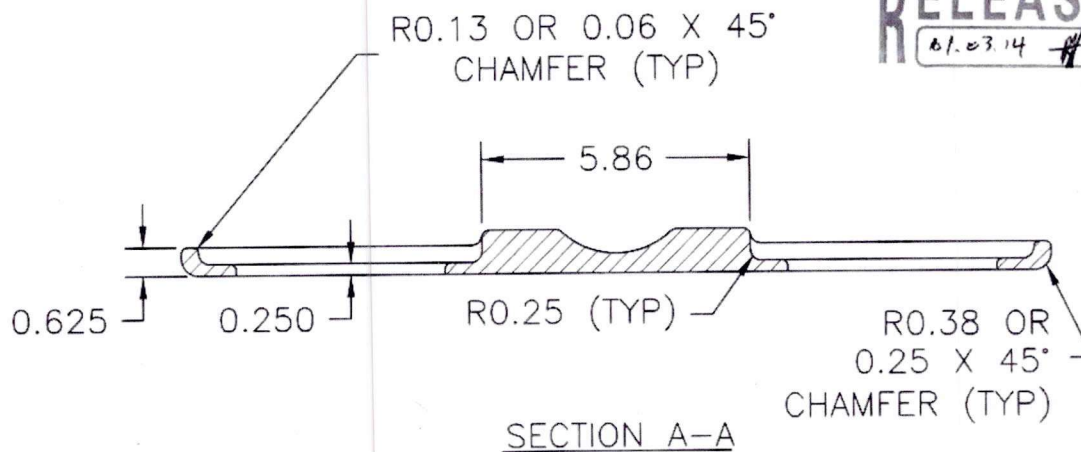


BEARPAW IS SYMMETRIC ABOUT CENTERLINE (EXCEPT FOR ENGRAVING)
MATERIAL: UHMW BLACK PER SPEC CONTROL DRAWING D2689
1.00 THICK (MACHINE TO 0.950)
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED



DESIGN CP	DRAWN BY CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D2996	REV. A SHEET 2 OF 2
DATE 01.02.23		TITLE BEARPAW	SCALE 1:4

RELEASED
01.03.14



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